

Non-Profit Institute Option

End-State Description: In its end-state, the ISS Research Institute (ISSRI) is envisioned as a contract to a non-profit organization managed within the NASA infrastructure. The ISSRI will be devoted to research, the utilization of the ISS for science, technology, and commercial purposes, and the provision of services to the user community and the public.

The ISSRI will facilitate the scientific and industrial communities' access to the ISS. It will play a pivotal role in science/technology/commercial leadership, representing and advocating for the user community and serving as the ISS interface knowledgeable expert for the users. The Institute may develop and sustain a certain level of flight equipment and its associated ground systems in order to better understand and represent the users' needs and issues.

The ISSRI is responsible for the creation of the Guest Investigator (GI) programs. A Guest Investigator (GI) is an Investigator who proposes to use an existing piece of hardware with limited or no modifications. This would include, but not be limited to, sub-rack level, multi-user "mini-facilities".

Rationale: The ISSRI provides the intellectual leadership and centralized focus for the utilization program, demonstrating NASA's commitment to ISS as a World-Class research facility. It also provides the consolidated, strong advocacy for the user community in order to effect change in the utilization systems and processes. The Institute provides a central, knowledgeable focal point for the user community's access to ISS utilization and supports the users' interaction with the ISS organizations. The Institute provides a consolidated and consistent approach for ISS education and outreach under the strategic guidance of NASA.

The Institute, responsible for the development, management, and total life cycle of GI programs, optimizes the use of available hardware and improves the time to flight for GI investigations. The GI Programs have the potential to encompass a significant percentage of ISS utilization.

These characteristics allow the ISSRI to meet the major objectives of an ISS Utilization Non Government Organization (NGO), including addressing the recurring issues and concerns from the user community.

Key Aspects:

The ISSRI key aspects include the following:

Management by and as an independent entity affiliated with NASA, acknowledging NASA sponsorship and support.

Strategic technical direction for the Institute is developed by a NASA Board of Directors, comprised of representatives from the NASA user Enterprises and the Chief Scientist. The Institute contract is managed by the Office of Biological and Physical Research (OBPR).

The Institute fosters cooperation, not competition, among the Government, academic, and industry sectors.

The Institute is designed to provide leadership and advocate for science, technology, and commercial users.

The Institute develops and manages Guest Investigator Programs.

A competitive process that adheres to NASA's policy of independent peer review for all research initiatives is key to the Institute scientific research selection process for GI Program grants awarded by the Institute.

Institute scientists may be competitively selected to conduct research under the auspices of the Institute (principal investigators selected under NASA Research Announcements, guest investigators selected under ISSRI Research Announcements).

Independent organizations may elect to use the Institute for selection, GI programs, payload development, and results archiving and dissemination at their discretion.

Strengths/ Weaknesses:

<u>Strengths</u>	<u>Weaknesses</u>
<ol style="list-style-type: none">1. Provides independent leadership for, and representation of, entire S/T/C user community.2. Well-established and successful precedent for NASA research institutes.3. Leadership stature and ability of Institute staff to conduct research enhances the recruitment and retention of the “best and brightest”.4. NASA user Enterprises retain control of strategic ISS utilization priorities and direction through the NASA Board of Directors and the Institute contract.5. Maintains the balance of competencies between NASA and the Institute.6. Minimal impact to CS workforce.7. NASA retains control of the full utilization budget through the Institute contract. Minimal impact to ISS vehicle, vehicle interfaces, and ongoing integrated engineering activities.8. Contract allows orderly termination of Institute at end of NASA’s ISS utilization life.	<ol style="list-style-type: none">1. Difficult to provide leadership for all three communities and multiple science disciplines with one institute.2. Addition of payload development may broaden scope beyond ability of research institute and introduces potential conflicts of interest.3. Responsibility for GI program selections and ability of staff to propose introduces potential for conflict of interest.4. Delegating utilization manifesting to the Institute may negatively impact current efforts to consolidate and streamline shuttle and station manifesting.5. Institute cannot negotiate and approve agreements directly with the International Partners.

Table 1: ISSRI Strength and Weaknesses

Transition Strategy:

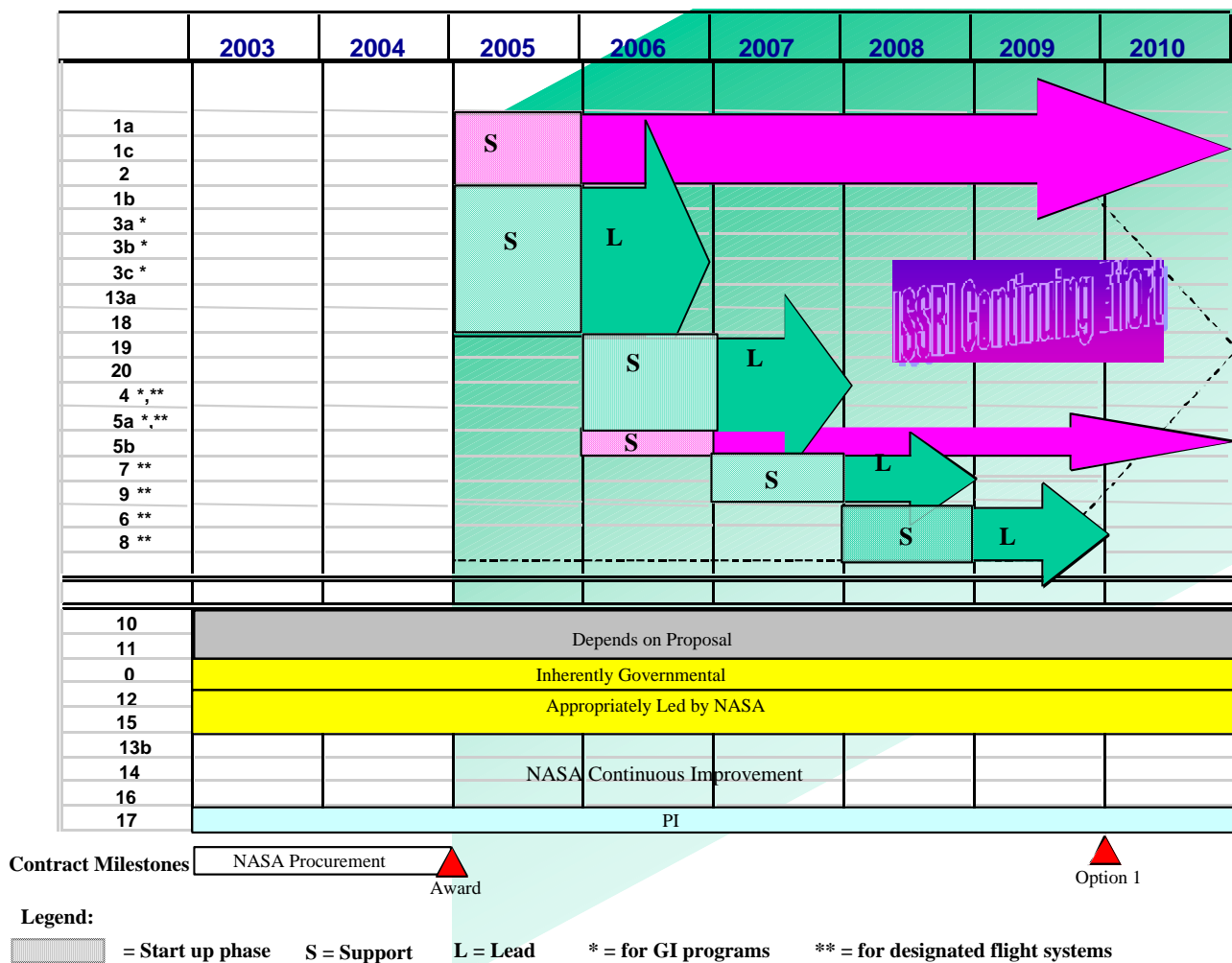


Figure 1: ISSRI Transition Strategy Schedule

* The transition to the ISS Research Institute (ISSRI) is envisioned to be a time-phased approach across five years, with the assumption that the ISSRI will assume the full set of responsibilities assigned by the end of the fifth year.

* The End state phase is the full up version of the ISSRI. It is expected that at the start of this phase the ISSRI has fully staffed up and demonstrated it's ability to take over the full range of roles and responsibilities required to perform it's function.